LISTING OF CLAIMS:

Claims 1-33 are pending in this application. Claims 1, 3, 4, 6, 9, 16, 18, 19, 25 and 31 are amended as shown below.

The following listing of claims will replace all prior versions and listings, of claims in this application.

1. (Currently Amended) An image reading apparatus which can operate in a plurality of image processing modes, comprising:

a photoelectric converter ~~for reading~~ adapted to read an object image and outputting an electrical signal;

a reference member used to correct image read nonuniformity of said photoelectric converter;

an illumination light source ~~for illuminating~~ adapted to illuminate an object and said reference member with light;

a timer adapted to measure an elaspsed time since a previous OFF timing of said illumination light source, and a time since said illumination light source is turned on;

an instruction unit adapted to issue a read instruction of the object; and

a controller ~~for controlling a read start timing of said reference member by said photoelectric converter after said illumination light source is turned on~~ that, when said instruction unit issues the read instruction of the object, adapted to set a wait time in correspondence with the elapsed time measured by said timer and a currently set image processing mode of the plurality of image processing modes, turns on said illumination light source again, and controls said photoelectric converter to begin to read said reference member after a lapse of the wait time since said illumination light source is turned on.

2. (Original) The image reading apparatus according to claim 1, further comprising a timer for measuring a time period elapsed since said illumination light source is turned on,

wherein said controller sets a wait time in correspondence with the currently set image processing mode, and controls said photoelectric converter to begin to read said reference member after a lapse of the wait time since said illumination light source is turned on.

3. (Currently Amended) The image reading apparatus according to claim [[2]] 1, wherein the image processing modes include a text mode and a photo mode, and a wait time in the photo mode is longer than a wait time in the text mode.

4. (Currently Amended) The image reading apparatus according to claim [[2]] 1, wherein the image processing modes include a binary mode and a multi-valued mode, and a wait time in the multi-valued mode is longer than a wait time in the binary mode.

5. (Original) The image reading apparatus according to claim 1, further comprising:

a timer for measuring an elapsed time since a previous OFF timing of said illumination light source, and a time since said illumination light source is turned on; and

an instruction unit for issuing a read instruction of an object,

wherein when said instruction unit issues the read instruction of the object, said controller sets the wait time in correspondence with the elapsed time measured by said timer and the currently set image processing mode, and turns on said illumination light source

857381 v1

again, and controls said photoelectric converter to begin to read said reference member after a lapse of the wait time since said illumination light source is turned on.

6. (Currently Amended) The image reading apparatus according to claim [[5]] 1, wherein when the time measured by said timer is not less than a predetermined time, said controller sets the wait time to be a predetermined time irrespective of the currently set image processing mode.

7. (Original) The image reading apparatus according to claim 6, wherein the image processing modes include a text mode and a photo mode, and when the time measured by said timer is shorter than the predetermined time, the wait time set in the photo mode by said controller is longer than the text mode.

8. (Original) The image reading apparatus according to claim 6, wherein the image processing modes include a binary mode and a multi-valued mode, and when the time measured by said timer is shorter than the predetermined time, the wait time set in the multi-valued mode by said controller is longer than the binary mode.

9. (Currently Amended) The image reading apparatus according to claim [[5]] 1, wherein when the time measured by said timer is not less than the predetermined time, said controller sets the wait time to be longer than a wait time set when the measured time is less than the predetermined time.

10. (Original) The image reading apparatus according to claim 9, wherein when the time measured by said timer is not less than the predetermined time, said controller sets a wait time by adding an addition time to a wait time set in a corresponding image processing mode when the time measured by said timer is shorter than the predetermined time.

11. (Original) The image reading apparatus according to claim 9, wherein the image processing modes include a text mode and a photo mode, and a wait time in the photo mode is longer than a wait time in the text mode.

12. (Original) The image reading apparatus according to claim 9, wherein the image processing modes include a binary mode and a multi-valued mode, and a wait time in the multi-valued mode is longer than a wait time in the binary mode.

13. (Original) The image reading apparatus according to claim 1, wherein an amount of light emitted by said illumination light source decreases from an amount of light immediately after said illumination light source begins to emit light along with a lapse of time, after said illumination light source is turned on.

14. (Original) The image reading apparatus according to claim 1, wherein said illumination light source is one of incandescent lamps including a xenon lamp, fuse lamp, halogen lamp, and the like, fluorescent lamps such as an electrodeless rare gas lamp, hot cathode fluorescent lamp, cold cathode fluorescent lamp, semi-hot lamp, and the like, an LED, a gas laser, a semiconductor laser (LD), and electroluminescence.

15. (Original) The image reading apparatus according to claim 1, wherein said reference member is detachable.

16. (Currently Amended) A control method for controlling an image reading apparatus which can operate in a plurality of image processing modes, and includes a photoelectric converter for reading an object image and outputting an electrical signal, a reference member used to correct image read nonuniformity of the photoelectric converter, and an illumination light source for illuminating an object and the reference member with light, said method comprising:

857381 v1

issuing a read instruction of an object;

measuring a first time period since a previous OFF timing of the illumination light source;

checking a currently set image processing mode of the plurality of image processing modes;

~~wherein a read start timing of the reference member by the photoelectric converter since the illumination light source is turned on is controlled~~ setting, when the read instruction of the object is issued, a wait time in correspondence with the first time period and [[a]] the currently set image processing mode ~~of the plurality of image processing modes~~

turning on the illumination light source;

measuring a second time period since the illumination light source is turned on; and

controlling the photoelectric converter to begin to read the reference member after a lapse of the wait time since the illumination light source is turned on again.

17. (Original) The control method according to claim 16, comprising:

a checking step of checking the currently set image processing mode;

a setting step of setting a wait time in correspondence with the currently set image processing mode;

a time measurement step of measuring time since the illumination light source is turned on; and

a control step of controlling the photoelectric converter to begin to read the reference member after a lapse of the wait time since the illumination light source is turned on.

18. (Currently Amended) The control method according to claim [[17]] 16, wherein the image processing modes include a text mode and a photo mode, and a wait time in the photo mode is longer than a wait time in the text mode.

19. (Currently Amended) The control method according to claim [[17]] 16, wherein the image processing modes include a binary mode and a multi-valued mode, and a wait time in the multi-valued mode is longer than a wait time in the binary mode.

20. (Original) The control method according to claim 16, comprising:

an instruction step of issuing a read instruction of an object;

a first time measurement step of measuring an elapsed time since a previous OFF timing of the illumination light source;

a checking step of checking the currently set image processing mode;

a setting step of setting, when the read instruction of the object is issued in said instruction step, the wait time in correspondence with the elapsed time measured in said first time measurement step, and the currently set image processing mode;

a turn-on step of turning on the illumination light source;

a second time measurement step of measuring time since the illumination light source is turned on; and

a control step of controlling the photoelectric converter to begin to read the reference member after a lapse of the wait time since the illumination light source is turned on again.

21. (Currently Amended) The control method according to claim [[20]] 16, wherein when the first time period ~~measured in said first time measuring step~~ is not less than a predetermined time, the wait time is set to be a predetermined time ~~in said setting step~~ irrespective of the currently set image processing mode.

22. (Currently Amended) The control method according to claim 21, wherein the image processing modes include a text mode and a photo mode, and when the first time period ~~measured in said first time measuring step~~ is shorter than the predetermined time, the wait time set in the photo mode ~~in said setting step~~ is longer than the text mode.

23. (Currently Amended) The control method according to claim 21, wherein the image processing modes include a binary mode and a multi-valued mode, and when the first time period ~~measured in said first time measuring step~~ is shorter than the predetermined time, the wait time set in the multi-valued mode ~~in said setting step~~ is longer than the binary mode.

24. (Currently Amended) The control method according to claim [[20]] 16, wherein when the first time period ~~measured in said first time measuring step~~ is not less than the predetermined time, the wait time is set ~~in said setting step~~ to be longer than a wait time set when the measured time is less than the predetermined time.

25. (Currently Amended) The control method according to claim 24, wherein when the first time period ~~measured in said first time measuring step~~ is not less than the predetermined time, a wait time is set ~~in said setting step~~ by adding an addition time to a wait time set in a corresponding image processing mode when the first time period ~~measured in said first time measuring step~~ is shorter than the predetermined time.

26. (Original) The control method according to claim 24, wherein the image processing modes include a text mode and a photo mode, and a wait time in the photo mode is longer than a wait time in the text mode.

27. (Original) The control method according to claim 24, wherein the image processing modes include a binary mode and a multi-valued mode, and a wait time in the multi-valued mode is longer than a wait time in the binary mode.

28. (Original) The control method according to claim 16, wherein an amount of light emitted by the illumination light source decreases from an amount of light immediately after the illumination light source begins to emit light along with a lapse of time, after the illumination light source is turned on.

29. (Original) The control method according to claim 16, wherein the illumination light source is one of incandescent lamps including a xenon lamp, fuse lamp, halogen lamp, and the like, fluorescent lamps such as an electrodeless rare gas lamp, hot cathode fluorescent lamp, cold cathode fluorescent lamp, semi-hot lamp, and the like, an LED, a gas laser, a semiconductor laser (LD), and electroluminescence.

30. (Original) The control method according to claim 16, wherein the reference member is detachable.

31. (Currently Amended) A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for controlling an image reading apparatus which can operate in a plurality of image processing modes, and includes a photoelectric converter for reading an object image and outputting an electrical signal, a reference member used to correct image read nonuniformity of the photoelectric converter, and an illumination light source for illuminating an object and the reference member with light, said product including:

857381 v1

first computer readable program code means for issuing a read instruction of an object;

second computer readable program code means for measuring an elapsed time since a previous OFF timing of the illumination light source;

third computer readable program code means for checking the currently set image processing mode of the plurality of image processing modes;

~~computer readable program code means for controlling a read start timing of the reference member by the photoelectric converter after the illumination light source is turned on~~ fourth computer readable program code means for, when the read instruction of the object is issued, setting a wait time in correspondence with the measured elapsed time and [[a]] the currently set image processing mode ~~of the plurality of image processing modes~~;

fifth computer readable program code means for turning on the illumination light source;

sixth computer readable program code means for measuring time since the illumination light source is turned on;

seventh computer readable program code means for controlling the photoelectric converter to begin to read the reference member after a lapse of the wait time since the illumination light source is turned on again.

32. (Original) The computer program product according to claim 31, comprising:

first computer readable program code means for checking the currently set image processing mode;

second computer readable program code means for setting a wait time in correspondence with the currently set image processing mode;

third computer readable program code means for measuring time since the illumination light source is turned on; and

fourth computer readable program code means for controlling the photoelectric converter to begin to read the reference member after a lapse of the wait time since the illumination light source is turned on.

33. (Original) The computer program product according to claim 31, comprising:

first computer readable program code means for issuing a read instruction of an object;

second computer readable program code means for measuring an elapsed time since a previous OFF timing of the illumination light source;

third computer readable program code means for checking the currently set image processing mode;

fourth computer readable program code means for, when the read instruction of the object is issued, setting the wait time in correspondence with the measured elapsed time, and the currently set image processing mode;

fifth computer readable program code means for turning on the illumination light source;

sixth computer readable program code means for measuring time since the illumination light source is turned on; and

seventh computer readable program code means for controlling the photoelectric converter to begin to read the reference member after a lapse of the wait time since the illumination light source is turned on again.

857381 v1